CITY OF HELENA

Position Title: Mechanic/Welder

Department: Public Works **Division:** Shop

Grade: <u>139</u>

FLSA: Non-Exempt



The City of Helena is an equal opportunity employer. The City shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Purpose:

The purpose of this position is to perform duties as a skilled Mechanic and Welder in servicing, repairing, rebuilding, manufacturing, system designing, fabricating specialized parts, diagnosing and troubleshooting of special equipment and motorized vehicles. Position performs a variety of routine and highly technical skills associated with the maintenance and report of gasoline and diesel vehicles, machinery and equipment. Types of equipment involved are parks maintenance mowers and lift trucks, solid waste refuse trucks, sewer cleaning equipment, snow removal equipment, street sweepers, fire apparatus, transit buses and vans, police protection vehicles, fleet cars and pickups and includes all facets of heavy equipment used in street, water and sewer maintenance.

Essential Duties: These job functions are the essential duties of the position and are not all-inclusive of all the duties the incumbent may be assigned.

This position performs routine and complex journeyman level diagnostics, repairs and maintenance on all aspects of city vehicles and motorized and non-motorized equipment, ranging from, but not limited to, vehicles and equipment listed above; determines the extent of all equipment repairs and level of action to be taken (repair or replacement) for safe and proper operability, to maintain cost effectiveness, and maximize serviceable life of equipment and components; performs preventive and scheduled maintenance; and provides technical expertise in diagnosing equipment problems, determining repairs needed and course of action to be taken. Position troubleshoots and repairs hydraulic and air brake systems, electrical systems, drive trains, cooling systems, and fuel systems.

This position maintains and repairs complex hydraulic systems, (electric over hydraulic and electric over air); Must stay abreast of technology changes and design/repair practices relative to City fleet vehicles and equipment; must understand correct operation of hydraulic systems and be able to follow troubleshooting tables and test points to isolate failures; must be able to diagnose and repair on-board computer problems, downloading stored fault codes, programming, testing feedback and control circuits with laptop computers and diagnostic software, VOM meters, etc.; and must follow technical drawings, shop manuals, or other technical sources and communicate effectively with other technicians or specialists.

This position performs gas and arc-welding associated with the design, fabrication and installation of special or modified parts and equipment; diagnoses and repairs electrical control systems, with the ability to interpret and comprehend electrical schematics with the use of scan tools, reference books and online diagnostic programs.

This position maintains shop in a clean and orderly condition; evaluates equipment performance on an ongoing basis and proposes changes or modifications in order to better meet department needs; continually monitors shop operations for unsafe working conditions or practices; determines need and recommends updated safety equipment to administration, utilizing proper usage; and attends meetings, schools and seminars to further knowledge and maintain expertise.

Incumbent must be willing to be on-call on a rotating basis and is subject to call out at any time to respond to emergencies or to meet repair demands on the road, in all weather conditions.

Essential Knowledge, Skills and Abilities Related to this Position:

Knowledge of:

- The operation, repair, and preventive maintenance of light and heavy gasoline and diesel-powered vehicles and equipment and automotive apparatus.
- Journeyman level experience in equipment repair and operational knowledge of equipment such as, but not limited to: semi-tractors and trailers, dump trucks with snow plow and sand spreaders, front end loaders, back hoe / loaders, air compressors, water and sludge pumps, front, rear and side loading refuse trucks, grizzly loaders, sewer jet and vac trucks, road graders, hot asphalt patch and slurry seal trucks, sludge injection vehicles, street sweepers, police response units, complex fire apparatus, bucket lift trucks, light and heavy duty cars and pickups, power mowers and miscellaneous other city equipment.
- Arithmetic, algebra, geometry, calculus, statistics and their applications in this profession.
- The hazards and safety precautions of the trade, and use of protective clothing or gear while exposed to power tools and equipment, caustic and hazardous materials, or while performing physical activities.
- The principles and operation of internal combustion engines, as well as gas, and diesel engines.
- Methods, materials, tools, and standard practices of the auto/diesel mechanics trade.
- Circuit boards, processors, chips, electronic equipment and computer hardware and software, including application and programs applicable to this profession.
- The hazards and safety precautions of the mechanic's trade.
- Principles of operation of internal combustion and diesel engines.
- Steering and suspension systems, and electrical systems and equipment.
- Techniques and practices of gas and arc welding.

Skill or ability to:

- Use tools and equipment including, but not limited to: air tools, jacks, and hoists, mechanic's hand and
 power tools, all arc welding, oxyacetylene and cutting equipment, machining and metal fabrication
 equipment, measuring gauges and instruments, and sophisticated electronic and other diagnostic equipment
 including laptop computers with diagnostic software, along with various miscellaneous tools and
 equipment needed for this specific profession.
- Repair machines or systems using the needed tools
- Determine causes of operating errors and deciding best method of repair.
- Watch gauges, dials or other indicators to make sure equipment is working properly
- Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Identify complex problems and review related information to develop and evaluate options and implement solutions.
- Determine the correct kind of tools and equipment needed to do a job.
- Understand the implications of new information or both current and future problem-solving and decisionmaking.
- Start, drive, or operate equipment or devices to test performances and, troubleshoot/diagnose, detect and isolate causes of equipment failures and make required repairs.
- Must be able to respond to emergency situations and demands, calmly and efficiently.
- Maintain service records, estimate costs and materials; order parts and maintain an inventory
- Quickly and repeatedly adjust the controls of a machine or vehicle to exact positions.
- Be careful about detail and thorough in completing work tasks.
- Communicate effectively orally and in writing, and to follow oral and written instructions.
- Establish and maintain effective working relationships and communication with coworkers, administration, other agencies and technical experts. Uses teamwork to obtain objectives and goals of the department.

Physical Demands:

The nature of mechanics' work involves bending, crawling, stooping, and climbing, reach over the head, talk, hear and see in order to affect repairs. Must be able to perform strenuous physical activity in lifting, carrying, and/or operating the tools, equipment and materials needed to fulfill position of mechanic/welder. Requires the ability to move or lift items weighing up to 50 to 75 pounds. The work is generally performed in or near the vehicle maintenance shops, in an environment with exposure to dust, fumes, noise, odors, grease, caustic and hazardous materials and adverse weather conditions. Has constant contact with, moving parts, electrical, high pressure and high speed power tools and special equipment.

Minimum Qualifications (Education, Experience and Training):

This position requires a minimum of graduation from mechanics trade school **OR** high school graduation or equivalent with 5 years experience to equal a certified journeyman auto/diesel mechanic. Other relevant combinations of education and work experience may be evaluated on an individual basis.

License or Certificate:

Must possess a valid Class A CDL with air brakes and taker endorsement with acceptable driving record at the time of hire and have the ability to obtain a valid MT Class A CDL within six months of hire.

Special Requirements:

Subject to mandatory drug testing for drugs and/or alcohol on a random, reasonable suspicion, post-accident, return-to-work and follow-up basis.

Supervision Received:

Supervised by the Street, Traffic & Fleet Services Superintendent.

Supervision Exercised:

None

The specific statements shown in each section of this position description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

Updated: August 2017